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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,976	05/16/2005	Soichiro Watanabe	272239US0PCT	1724

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.

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EXAMINER

MERCIER, MELISSA S

ART UNIT

PAPER NUMBER

1615

NOTIFICATION DATE

DELIVERY MODE

10/17/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/534,976

**Applicant(s)**

WATANABE, SOICHIRO

**Examiner**

MELISSA S. MERCIER

**Art Unit**

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-8,10-14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-8,10-14 and 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Summary**

Receipt of Applicants Remarks and Amended Claims filed on June 20, 2008 is acknowledged. Claims 1-3, 5-8, 10-14, 16-19 remain pending in this application.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2, 5, 8, 11-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minnix (US Patent 6,309,655) in view of Shiraishi (US Patent 5,733,344)

Minnix discloses a facial cleansing mask cosmetic composition (abstract). The composition comprises a water insoluble polymer such as silica (column 3, line 56). A water soluble binder can be used, such as polyvinyl alcohol (column 4, lines 8-13). Minnix discloses by adding a water soluble binder, the rate of colorant release over time, independent of physical manipulation, is increased, such that an exposure time indicating effect is amplified (column 4, lines 22-25). Colorants can also be added in the amount of 0.1-35% based on the total weight of the self indicating disintegrating granules (column 4, lines 37-41). While the composition is meant to be anhydrous, Minnix discloses that some water may be present in the amount of less than 5% (column 6, lines 32-47). Thickeners can also be added, such as aluminum magnesium silicate, kaolin (water swelling clay mineral), and bentonite (column 10, lines 26-37).

Anionic surfactants can be used as well as polyglycerol fatty acid esters (column 10, lines 5-18). Ascorbic acid derivatives can also be added (column 7, lines 45-64).

Minnix does not disclose titanium-titanium sinter as a colorant.

Shiraishi discloses a temporary hair dye containing titanium black and other pigments (abstract). Titanium-titanium dioxide sintered substance is disclosed as titanium black (column 2, lines 9-10). Regarding the specific conditions of preparation of the sinter, it is the examiners position that Shiraishi discloses the use of Tilack D, which applicant's specification on page 6, top paragraph, recites as an acceptable sinter, so it would therefore meet the specific limitations of the instant claims.

Regarding the specific limitations of claims 12-14 and 16, the claim is drawn to a process of preparing the titanium-titanium dioxide sinter, thereby considered a product by process limitation, since the claims are drawn to the product, the method by which the product is obtained does not hold patentable weight. Furthermore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have optimized the particle size of the dye in order to optimize the coloring and to negate any kind of gritty feeling commonly associated with larger particles.

While the Shiraishi reference discloses a hair dye composition, it is noted by the examiner that the instant application discloses the use of titanium-titanium dioxide sinter is "to increase the covering effect of the cosmetic pack preparation, to make it easy to identify the applied areas and peeled areas and the cleaning effect, to increase the drying speed and film strength, thereby rendering the film easy to be peeled off". (page 5, 2nd paragraph). Additionally, it is noted Applicant states "any titanium-titanium

dioxide sinter commonly used in cosmetic composition can be used without specific limitations". Therefore, it would have been obvious to a person of ordinary skill in the art to have substituted the titanium-titanium dioxide sinter of Shiraishi with the colorant of Minnix in order to obtain a cosmetic composition with a dark coloring and that has a weak pigment base and therefore, will not stain the skin (column 1, lines 43-54).

The instant claims differ from the references only in the specific percentage of polyvinyl alcohol selected for the composition. However, It would have been deemed *prima Facie* obvious to one having ordinary skill in the art at the time of the invention to optimize the percentage of polyvinyl alcohol, to prepare a composition for topical application because the determination of a specific percentage having the optimum therapeutic effect is well within the level of one having ordinary skill in the art, and the artisan would be motivated to determine optimum amounts to get the maximum effect of the film forming polymer in order to obtain the desired level of film left on the skin. Therefore, the invention as Whole has been *prima face* obvious to one of ordinary skill in the art at the time the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Minnix (US Patent 6,309,655) and Shiraishi et al. (US Patent 5,733,344) in view of Mochizuki et al. (US Patent 6,602,513).

The combined teachings of Minnix and Shiraishi are disclosed above and applied in the same manner.

Minnix and Shiraishi do not disclose specific anionic surfactants; in particular phosphate, sulfonate, or sulfate based anionic surfactants.

Mochizuki discloses pack compositions comprising anionic surfactants including higher fatty acid amide sulfonates including sodium N-myristoyl-N-methyltaurate, sodium methyltaurate cocoate and sodium laurylmethyltaurid, phosphoric ester salts including sodium POE oleyl ether phosphate and POE stearyl ether phosphoric acid, sulfosuccinates, alkylbenzenesulfonates, higher fatty acid ester sulfates including sodium hydrogenated glyceryl cocoate sulfate, sulfated oils, alpha.-olefinsulfonates, higher fatty acid ester sulfonate, sec-alcohol sulfate, higher fatty acid alkyloyl amide sulfate, for example (column 4, line 44 through column 5, line 5).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have used the anionic surfactants disclosed by Mochizuki in the pack composition disclosed by Minnix and Shiraishi since Minnix discloses the generic teaching of the additon of a anionic surfactant and Mochizuki discloses the same type of peel off cosmetic pack with specific surfactants disclosed. It would be within the knowledge of one of ordinary skill to have used an anionic surfactant for the well known functional property known in the art and used for cosmetic peel compositions.

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minnix (US Patent 6,309,655) and Shiraishi et al. (US Patent 5,733,344) in view of Kaneda et al. (US Patent 6,596,285).

The combined teachings of Minnix and Shiraishi are disclosed above and applied in the same manner.

Minnix and Shiraishi do not disclose the use of two different PVA's.

Kaneda discloses polyvinyl alcohols are divided into several grades based on differences in the degree of polymerization and the degree of saponification. The degree of polymerization is usually indicated by the viscosity measurement of a 4%-concentration aqueous solution at 20C. For the present invention, those with a low viscosity of 4 cps to a high viscosity of 70 cps can be used. However, the formed film tends to become stronger and the viscosity of the pack increases as the degree of polymerization becomes higher. Therefore, considering the adequate strength of the film and the viscosity which makes pack application easy. On the other hand, the degree of saponification is defined based on different saponification ratios of the acetyl groups in polyvinyl acetate when manufacturing polyvinyl alcohols, which is largely divided into the complete saponification type which is saponified almost completely (98-100%), and "the partial saponification type", which is partially saponified (87-89%) with some remaining acetyl groups. Although both saponification types can be used, the partial saponification type has a higher solubility at room temperature, better viscosity stability at lower temperatures, and a superior ability to emulsify the blended oil, and therefore it is preferable to use the partial saponification type polyvinyl alcohol. The blend ratio of the aforementioned polyvinyl alcohol is preferably 5-20 wt %, more preferably 9-15 wt %, of the total amount of the pack cosmetic. If the blend ratio is less than 5 wt %, then a film with adequate strength will not form and even peeling will be

difficult. On the other hand, if the blend ratio is more than 20 wt %, then the viscosity will be too high and application may not be easy (column 2, lines 20-52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used two different forms of PVA as taught by Kaneda in order to optimize the physical characteristics of strength and viscosity in order to make application of the product easier.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Minnix (US Patent 6,309,655) and Shiraishi et al. (US Patent 5,733,344) in view of Kern (US Patent 4,717,737).

The combined teachings of Minnix and Shiraishi are disclosed above and applied in the same manner.

Minnix and Shiraishi do not disclose the use of dioctyl sodium sulfosuccinate.

Kern discloses an antibacterial composition in the form of a lotion, cream, and ointment, for example (column 1, lines 5-13). The composition comprises dioctyl sodium sulfosuccinate, as an antibacterial agent.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have used the antibacterial agent dioctyl sodium sulfosuccinate in the composition of Minnix and Shiraishi. Since Yano discloses the use of antibacterial agents in his peel-off type cosmetic pack. It would have been within the knowledge of one of ordinary skill in the art at the time the invention was made to have incorporated the particular antibacterial component for its functional properties.



Claim 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minnix (US Patent 6,309,655) and Shiraishi et al. (US Patent 5,733,344) in view of Massaro et al. (US 2004/0091446).

The combined teachings of Minnix and Shiraishi are disclosed above and applied in the same manner.

Minnix and Shiraishi do not disclose the use of particular polyglycerol fatty acid esters or their amount.

Massaro discloses lamellar cleansing compositions comprising lamellar structurants (paragraph 0132) and emollients (paragraph 0136).

Examples include glyceryl isostearate, glycerol oleate (paragraph 0135), glycerol laurate, and glycerol stearate (paragraph 0140). The emollient is present in the amount of 7-40% (paragraph 0143).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the particular polyglycerol fatty acid esters of Massaro into the generic teaching of polyglycerol fatty acid esters since they are taught to enable compositions to suspend particles more readily while still maintaining good shear thinning properties and the desired rheology (paragraph 0133). . It would have been within the knowledge of one of ordinary skill in the art at the time the invention was made to have incorporated the particular emollient component for its functional properties.

Claims 1-3, 5, 11-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yano et al. (US Patent 6,299,887) in view of Shiraishi et al. (US Patent 5,733,344) and further in view of Massaro et al. (US 2004/0091446).

Yano discloses a cosmetic peel off type pack composition comprising 10% polyvinyl alcohol, kaolin (water swelling clay mineral) and sodium alginate (a water soluble thickener), purified water, and titanium dioxide (a cosmetic pigment). The film forming agents, (i.e. polyvinyl alcohol) as added to the aqueous phase and mixed (Example 13, column 21).

Yano further discloses additional components including oils, surfactants, humectants, UV-shielding agents, preservatives, thickeners, colorants, and medicinal components, including vitamins and antibacterial agents (column 8, lines 13-29).

Yano does not disclose titanium-titanium dioxide sinter as a dye or the use of a polyglycerol fatty acid ester.

Shiraishi discloses a temporary hair dye containing titanium black and other pigments (abstract). Titanium-titanium dioxide sintered substance is disclosed as titanium black (column 2, lines 9-10). Regarding the specific conditions of preparation of the sinter, it is the examiners position that Shiraishi discloses the use of Tilack D, which applicant's specification on page 6, top paragraph, recites as an acceptable sinter, so it would therefore meet the specific limitations of the instant claims.

Regarding the specific limitations of claims 12-14 and 16, the claim is drawn to a process of preparing the titanium-titanium dioxide sinter, thereby considered a product by process limitation, since the claims are drawn to the product, the method by which

the product is obtained does not hold patentable weight. Furthermore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have optimized the particle size of the dye in order to optimize the coloring and to negate any kind of gritty feeling commonly associated with larger particles.

While the Shiraishi reference discloses a hair dye composition, it is noted by the examiner that the instant application discloses the use of titanium-titanium dioxide sinter is "to increase the covering effect of the cosmetic pack preparation, to make it easy to identify the applied areas and peeled areas and the cleaning effect, to increase the drying speed and film strength, thereby rendering the film easy to be peeled off". (page 5, 2nd paragraph). Additionally, it is noted Applicant states "any titanium-titanium dioxide sinter commonly used in cosmetic composition can be used without specific limitations". Therefore, it would have been obvious to a person of ordinary skill in the art to have substituted the titanium-titanium dioxide sinter of Shiraishi with the titanium dioxide pigment of Yano in order to obtain a cosmetic composition with a dark coloring and that has a weak pigment base and therefore, will not stain the skin (column 1, lines 43-54).

Massaro discloses lamellar cleansing compositions comprising lamellar structurants (paragraph 0132) and emollients (paragraph 0136).

Examples include glyceryl isostearate, glycerol oleate (paragraph 0135), glycerol laurate, and glycerol stearate (paragraph 0140). The emollient is present in the amount of 7-40% (paragraph 0143).

Massaro additionally discloses anionic surfactants, including sulfonate (paragraph 0070) and phosphate (paragraph 0073) based surfactants.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the particular polyglycerol fatty acid esters of Massaro since they are taught to enable compositions to suspend particles more readily while still maintaining good shear thinning properties and the desired rheology (paragraph 0133). It would have been within the knowledge of one of ordinary skill in the art at the time the invention was made to have incorporated the particular emollient component for its functional properties.

The instant claims differ from the references only in the specific percentage selected for the compositions. However, It would have been deemed *prima Facie* obvious to one having ordinary skill in the art at the time of the invention to optimize the percentage of dye coloring, to prepare a composition for topical application because the determination of a specific percentage having the optimum therapeutic effect is well within the level of one having ordinary skill in the art, and the artisan would be motivated to determine optimum amounts to get the maximum effect of the active compounds. Therefore, the invention as a whole has been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yano et al. (US Patent 6,299,887), Shiraishi et al. (US Patent 5,733,344), Massaro et al. (US 2004/0091446) in view of Kaneda et al. (US Patent 6,596,285).

The combined teachings of Yano, Shiraishi, Massaro are disclosed above and applied in the same manner.

Yano, Shiraishi, and Massaro do not disclose the use of ascorbic acid derivatives and/or water-soluble glycyrrhizic acid derivatives. The use of two different PVA's is also not disclosed.

Kaneda discloses an emulsified fast drying peel-off type cosmetic pack comprising antioxidants (column 4, line 37).

Regarding claims 6-7, it is additionally disclosed polyvinyl alcohols are divided into several grades based on differences in the degree of polymerization and the degree of saponification. The degree of polymerization is usually indicated by the viscosity measurement of a 4%-concentration aqueous solution at 20C. For the present invention, those with a low viscosity of 4 cps to a high viscosity of 70 cps can be used. However, the formed film tends to become stronger and the viscosity of the pack increases as the degree of polymerization becomes higher. Therefore, considering the adequate strength of the film and the viscosity which makes pack application easy. On the other hand, the degree of saponification is defined based on different saponification ratios of the acetyl groups in polyvinyl acetate when manufacturing polyvinyl alcohols, which is largely divided into the complete saponification type which is saponified almost completely (98-100%), and "the partial saponification type", which is partially saponified (87-89%) with some remaining acetyl groups. Although both saponification types can be used, the partial saponification type has a higher solubility at room temperature, better viscosity stability at lower temperatures, and a superior ability to emulsify the blended

oil, and therefore it is preferable to use the partial saponification type polyvinyl alcohol. The blend ratio of the aforementioned polyvinyl alcohol is preferably 5-20 wt %, more preferably 9-15 wt %, of the total amount of the pack cosmetic. If the blend ratio is less than 5 wt %, then a film with adequate strength will not form and even peeling will be difficult. On the other hand, if the blend ratio is more than 20 wt %, then the viscosity will be too high and application may not be easy (column 2, lines 20-52).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have used the antioxidants disclosed by Kaneda in the composition disclosed by Yano, Shiraishi, and Massaro since Kaneda discloses the same type of peel-off composition taught by Yano and both references teach the use of antioxidants and the use of different types of PVA. Ascorbic acid is a well-known antioxidant used in cosmetic compositions.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yano et al. (US Patent 6,299,887), Shiraishi et al. (US Patent 5,733,344), Massaro et al. (US 2004/0091446), in view of Kern (US Patent 4,717,737).

The combined teachings of Yano, Shiraishi, and Massaro are disclosed above and applied in the same manner.

Yano, Shiraishi, and Massaro do not disclose the use of dioctyl sodium sulfosuccinate.

Kern discloses an antibacterial composition in the form of a lotion, cream, and ointment, for example (column 1, lines 5-13). The composition comprises dioctyl sodium sulfosuccinate, as an antibacterial agent.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have used the antibacterial agent dioctyl sodium sulfosuccinate in the composition of Yano, Shiraishi, and Massaro. Since Yano discloses the use of antibacterial agents in his peel-off type cosmetic pack. It would have been within the knowledge of one of ordinary skill in the art at the time the invention was made to have incorporated the particular antibacterial component for its functional properties.

### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. Applicant has argued the POE fatty acid esters are different from the instantly claimed polyglycerol fatty acid esters. This argument is persuasive and therefore, the rejection has been withdrawn. However, a new search of the prior art was conducted and new rejections have been made. Applicant did not present any arguments regarding the other references of record.

### ***Conclusion***

Due to the new grounds of rejection, this office action is made Non-Final. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to MELISSA S. MERCIER whose telephone number is (571)272-9039. The examiner can normally be reached on 8:00am-4:30pm Mon through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melissa S Mercier/  
Examiner, Art Unit 1615

/MP WOODWARD/  
Supervisory Patent Examiner, Art Unit 1615